E. C. FAIN.

DISPENSING REFRIGERATOR.

APPLICATION FILED SEPT. 18, 1913.

1,105,502.

Patented July 28, 1914.

2 SHEETS—SHEET 1.

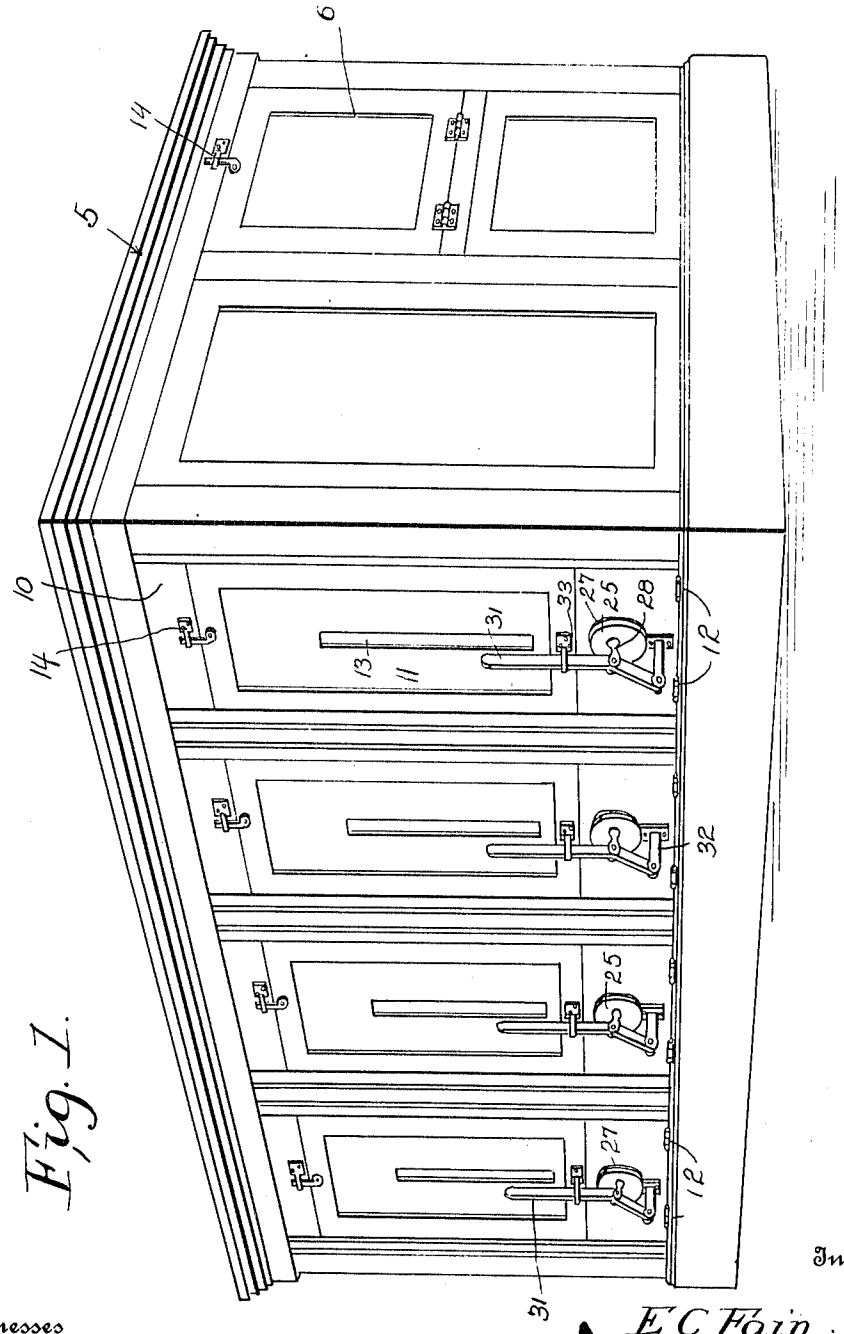


Fig. 1.

Witnesses

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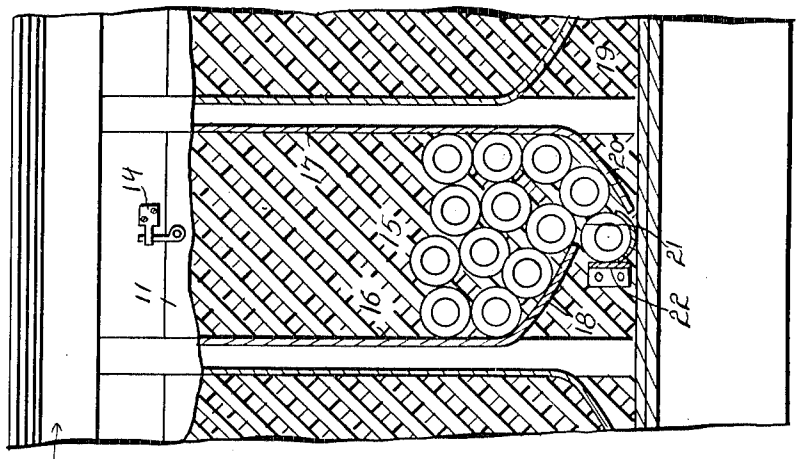


Fig. 3.

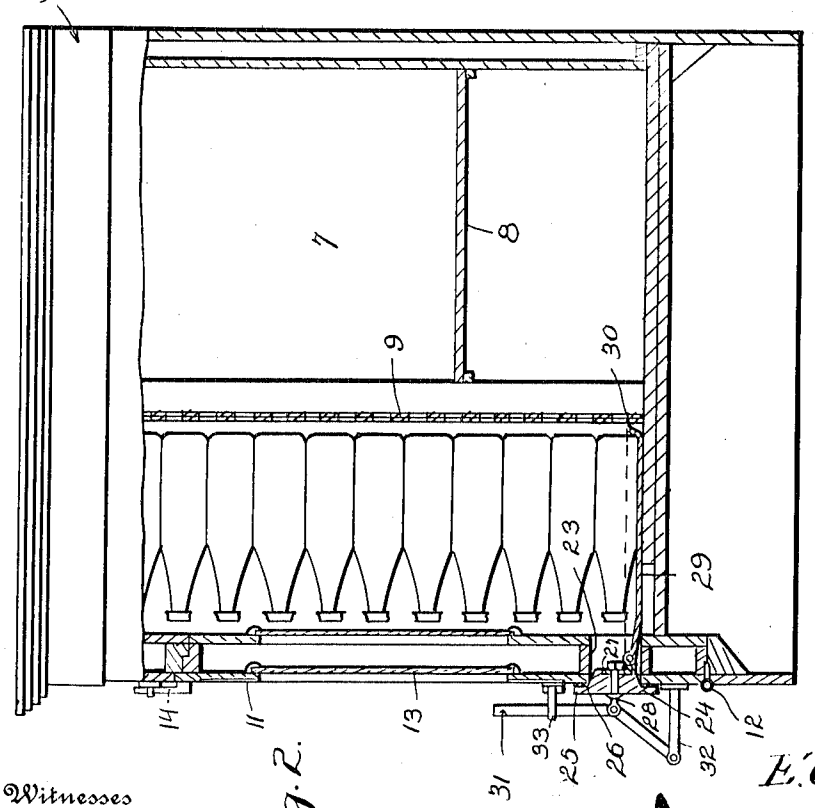


Fig. 2.

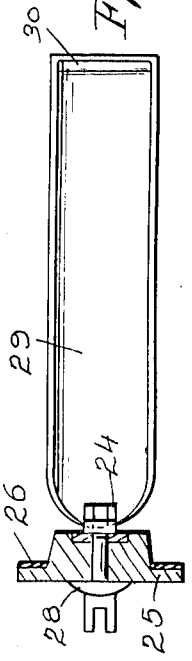


Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

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DISPENSING-REFRIGERATOR.

1,105,502. Specification of Letters Patent. Patented July 28, 1914.

Application filed September 18, 1913. Serial No. 790,509.

To all whom it may concern:

Be it known that I, EDWARD C. FAIN, a citizen of the United States, residing at Wetumpka, in the county of Elmore and State of Alabama, have invented certain new and useful Improvements in Dispensing-Refrigerators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention comprehends improvements in refrigerators and relates more particularly to those of the type which are especially designed for dispensing bottled liquids.

One of the objects of the invention resides in the provision of a dispensing refrigerator of this type so constructed as to be capable of holding a large number of bottles which may be ejected, one at a time, from their respective compartments by simply pulling upon a lever.

Another and more specific object of the invention is to provide a bottle dispensing refrigerator including a discharge opening, a plug adapted to close said opening, a swinging lever to which said plug is secured and an ejector plate pivotally attached to the plug for the purpose of forcing a bottle through the discharge opening when the plug is withdrawn.

With these and other objects in view, as will become more apparent as the description proceeds, the invention consists in certain novel features of construction, combination and arrangement of parts, as will be hereinafter described and claimed.

For a complete understanding of my invention, reference is to be had to the following description and accompanying drawings, in which,

Figure 1 is a perspective view of my improved dispensing refrigerator, Fig. 2 is a vertical transverse sectional view with the upper portion of the refrigerator shown in position, Fig. 3 is a fragmentary section taken on a plane at right angles to the plane of Fig. 2, and Fig. 4 is a detail top plan view of one of the plugs and ejector plates.

Referring in detail to the drawings by numerals 5 designates as an entirety the refrigerator which may be of any desired construction. A door 6 is provided at one end of the refrigerator, whereby ice may be placed into the ice compartment 7 upon the shelf or frame 8. A vertical partition 9 extends longitudinally within the refrigerator and separates the ice compartment from the bottle compartments to be described later. The front wall 10 is provided with a plurality of rectangular openings which are closed by the doors 11. These doors are hingedly secured, at their lower ends, to the front wall by means of the hinges 12, are double walled, and are provided with the centrally positioned glass panels 13 whereby a view into the interior of the refrigerator may be had when the doors are closed. Suitable catches generally designated by the numeral 14 are provided for locking the doors in their closed positions. A plurality of bottle holding compartments 15 are formed within the refrigerator upon the front side of the partition 9, one compartment being located directly in the rear of each of the doors 11. Each compartment is preferably formed by the galvanized iron walls 16 and 17, which are suitably secured in their proper positions. The wall 16 is extended laterally adjacent its lower end toward the center of the compartment to form a bottom section 18 which is inclined downwardly and toward the center of the compartment. The bottom section 18 terminates at a distance above the bottom 19 of the refrigerator. The wall 17 is extended laterally adjacent its lower end to form the other bottom section 20 of the compartment 15, said section extending downwardly and toward the center of the compartment. The section 20 terminates below the section 18 leaving a discharge opening 21 at the bottom of the compartment. A stop plate 22 is provided for checking the bottles as they pass through the opening 21 so as to hold them in proper alinement with an ejector plate to be described later. The stop plate 22 is a narrow strip preferably formed of galvanized iron which is disposed in a vertical plane and extends under the bottom section 18.

Each of the doors 11 is formed with a circular discharge opening 23 on a line with its longitudinal center and adjacent the lower end thereof. These openings are alined with the discharge openings 21 of the compartment 15. A circular plug 24 is employed for the purpose of closing each of the openings 23. These plugs are formed with

the peripheral flanges 25 which engage the outer faces of the doors and if desired rubber gaskets 26 may be interposed between the flanges and the doors for the purpose of forming air tight joints. An angular bracket 27 is secured to the inner side of each of the plugs by means of a bolt 28 and has pivotally connected thereto an ejector plate 29. This plate appears somewhat oblong in shape and plane, is concavo-convex in cross-section, and has an upwardly extending lip 30 formed upon its rear edge. The ejector plates slide between the stop strips 22 and bottom sections 20 and present their concave faces to the bottles which are to be discharged. An angular lever 31 is pivotally connected intermediate its ends between the ears formed upon the outer extremity of each of the bolts 28 and is pivotally connected at its lower end to an arm 32 which extends outwardly from the opening formed in each door. Suitable catches 33 are provided for the purpose of locking the levers 31 in such a position as to hold the plugs 24 within the openings 23.

From the foregoing it will be apparent that bottles placed within the compartments 15 will be fed downwardly by the force of gravity and that each time a plug 24 is withdrawn from its opening the ejector plate 29 attached to said plug will cause a bottle to be projected through the opening so that said bottle may be conveniently taken from the refrigerator. When the plug is returned to its normal position the ejector plate slides under the bottle next to be discharged and assumes the position shown in Fig. 2.

It is to be understood that while I have shown and described the preferred embodiment of my invention, I do not wish to be limited to this exact construction, combination, and arrangement of parts, but may make such changes as will fall within the spirit and scope of the invention as claimed.

What I claim is:—

1. A refrigerator of the character described including a bottle holding compartment having an opening in its bottom through which bottles may roll, a door closing said compartment and formed with an opening alined with the opening in the bottom of the compartment, a removable plug mounted on the door and closing the opening therein and an ejector plate pivotally secured to said plug, and extending inwardly under a bottle, the removal of said plug causing the bottle to be ejected through the opening in the door.

2. A bottle dispensing refrigerator including a bottle holding compartment formed with an opening in its bottom through which bottles are adapted to roll through the force of gravity, a door closing the front side of the compartment and formed with a circular opening in alinement with the opening formed in the bottom of the compartment, a plug removably fitted within said opening, an ejector plate hingedly connected at one end to said plug and extending under the opening formed in the bottom of the compartment, said ejector plate being formed on its rear end with a lip adapted to engage a bottle, and a pivoted lever to which said plug is connected, a movement of the lever away from the refrigerator causing the plug to be withdrawn and the ejector plate to draw a bottle through the opening formed in the door.

3. A bottle dispensing refrigerator including a bottle holding compartment, said compartment being formed with inclined bottom sections terminating in spaced relation to each other, whereby a discharge opening is formed, a stop plate secured at one side of the discharge opening, a door closing the compartments and formed with a circular opening opposite the discharge opening in the compartment, a plug removably fitted within the opening formed in the door, a bracket secured to the inner face of said plug, an elongated ejector plate pivotally secured at one end to said bracket and having a lip formed on its other end, the ejector plate being concavo-convex in cross section and extending under the opening formed in the bottom of the compartment, an arm extending forwardly from the door under the opening formed therein, an angular lever pivotally secured at one end to said arm and pivotally connected intermediate its ends to the plug, and means for locking the lever in such position as to hold the plug in its opening, a removal of the plug causing the ejector plate to draw a bottle from the compartment and project the same through the opening formed in the door.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD C. FAIN.

Witnesses:
B. HUFF,
H. J. COLLINS.